

SZELAGOWSKI, F.

although G. V. Kolosov's earlier work [Application of complex

SZELAGOWSKI, T.

The state of stress in a circular disc subjected to the tension of concentrated forces inside its field. p. 515.

ROZPRAWY INŻYNIERSKIE. (Polska Akademia Nauk. Instytut Podstawowych Problemów Techniki) Warszawa.
Vol. 6, no. 4, 1958.

Monthly list of East European Accessions (EEAI) LC. Vol. 5, no. 7, July 1959.

Uncl.

Szelagowski, Franciszek. Solution of the plane problem of elasticity, in a system of Cartesian coordinates, mass forces being taken into consideration. Arch. Mech. Stos. 10 (1958), 99-105. (Polish and Russian summaries)

5) The basic equations of equilibrium of plane elasticity in cartesian form are solved in terms of harmonic functions for the case when the mass forces are not zero. The particular form of the functions representing the mass forces is discussed and the particular case when these forces have a potential is treated. R. M. Morris.

2

Adp

SZELAGOWSKI, F.

The action of a concentrated moment on a half-plane disc. Bul Ac
Pol tech 7 no.9:503-506 '59. (EPAI 9:6)

1. Department of Mechanics of Continuous Media, Institute of Basic
Technical Problems, Polish Academy of Sciences.
(Elasticity) (Strains and stresses) (Plates)

SZELAGOWSKI, F.

The problem of a plate strip under external load. Bul Ac Pol tech
7 no.9:507-512 '59. (EAI 9:6)
(Elasticity) (Strains and stresses) (Plates)
(Load (Mechanics))

SZELAGOWSKI, F.

A semi-infinite plate acted on by a concentrated force. Bul Ac
Pol tech 8 no.2:77-82 '60. (EEAI 9:7)

1. Department of Mechanics of Continuous Media, Institute of Basic
Technical Problems, Polish Academy of Sciences.
(Strains and stresses) (Plates) (Elasticity)

SZELAGOWSKI, F.

Influence of an external load on an elliptic disc. Bul Ac pol tech
8 no.3:123-128 '60. (EEAI 9:11)

1. Department of mechanics of continuous media, Institute of Basic
Technical Problems, Polish Academy of Sciences.
(Elasticity)
(Load (Mechanics))

SZELAGOWSKI, F.

An orthotropic plate supported on two opposite boundaries with
uniformly loaded rectangular field parallel to the plate boundaries.
Bul Ac Pol tech 8 no.4:167-177 '60. (EEAI 9:10)

1. Department of Mechanics of Continuous Media, Institute of Basic
Technical Problems, Polish Academy of Sciences.
(Plates) (Load (Mechanics))

SZELAGOWSKI, F.

An infinite disc with partly loaded circular hole. Bul Ac Pol Tech 8
no.8:419-422 '60. (EEAI 10:6)

1. Department of Mechanics of Continuous Media, Institute of Basic
Technical Problems, Polish Academy of Sciences.
(Strains and stresses) (Elasticity)
(Load (Mechanics))

SZELAGOWSKI, F.

Contribution to the solution of the plane problem of elasticity theory
in functions of a complex variable. Bul Ac Pol Tech 8 no.10:565-567
'60.

1. Department of Mechanics of Continuous Media, Institute of Basic
Technical Problems, Polish Academy of Sciences.

S/124/62/000/005/039/048
D251/D308

10.6000

AUTHOR: Szelaowski, F.

TITLE: The problem of a semi-infinite strip under a load

PERIODICAL: Referativnyy zhurnal. Mekhanika, no. 5, 1962, 3,
abstract 5V17 (Bull. Acad. polon. sci. Ser. Sci. tekhn
1961, v. 9, no. 6, 347 - 352)

TEXT: The problem is considered, in general form, of the plane case of an infinite strip, whose contour is subjected to an arbitrary load. The problem is solved with the aid of functions of a complex variable on the basis of the works of G.V. Kolosov (primeneniye kompleksnykh diagramm i teorii funktsii kompleksnoy peremennoy k teorii uprugosti (Application of the Complex Diagram to the Theory of Elasticity) M.-L. ONTI, 1935). The upper halfplane is conformally transformed into a half-strip of breadth h by means of the correspondence $\zeta = -\cos \pi z/h$. The unknown functions, defined by real stresses, are expressed by means of Schwartz's integral. [Abstractor's note: Complete translation].

✓c

Card 1/1

SZELAGOWSKI, F.

A wedge shaped plate acted upon by an external load. Buł Ac Pol tech 9
no.6:353-356 '61.

1. Department of Mechanics of Continuous Media, Institute of Fundamental Technical Problems, Polish Academy of Sciences.

SZELAGOWSKI, Franciszek (Warsawa)

Strength testing of glued joints of steel elements. Archiw inz lad
7 no.4:475-482 '61.

SZELAGOWSKI, F.

A semi-infinite plate with edge slit, subjected to tension. Bul Ac Pol
tech 9 no.6:357-361 '61.

1. Department of Mechanics of Continuous Media, Institute of Funda-
mental Technical Problems, Polish Academy of Sciences.

S/124/63/000/001/037/080
D234/D308

AUTHOR: Szelagowski, F.

TITLE: Problem of the general solution of the plane problem of the theory of elasticity.

PERIODICAL: Referativnyy zhurnal, Mekhanika, no. 1, 1963, 6, abstract 1V29 (Bull. Acad. polon. sci. Sér. sci. techn. 1962, v. 10, no. 2, 51-55 (Eng.: summary in Rus.))

TEXT: It is shown that the solution of the plane problem of the theory of elasticity in the form of Kolosov-Muskhelishvili is the most general one in the sense that the solutions connected with the introduction of harmonic and biharmonic stress functions (Papkovich-Neuber and Airy functions) are reduced to it.
[Abstracter's note: Complete translation]

Card 1/1

*Dept. of Mechanics of Continuous Media,
Inst. Fundamental Technical Problems, Polish AS
Warsaw*

SZELAGOWSKI, F.

Rectangular plate acted on by an external load. Bul Ac tech
10 no.3:[123]-[131] '62.

1. Department of Mechanics of Continuous Media, Institute of
Fundamental Technical Problems, Polish Academy of Sciences,
Warsaw.

SZELAGOWSKI, F.

State of stress of an infinite disc with partly loaded circular hole. Bul Ac Pol tech 10 no.4:[197]-[204] '62.

1. Department of Mechanics of Continuous Media, Institute of Fundamental Technical Problems, Polish Academy of Sciences, Warsaw.

SZELAGOWSKI, F.

The problem of the infinite disc with a circular hole under a tangential load. Bul Ac Pol tech 10 no.5:[253]-[257] '62.

1. Department of Mechanics of Continuous Media, Institute of Fundamental Technical Problems, Polish Academy of Sciences, Warsaw.

SZELAGOWSKI, F.

Action of concentrated forces on an infinite disc with circular hole. Bul Ac Pol tech 10 no.6:[321]-[326] '62.

1. Department of Mechanics of Continuous Media, Institute of Fundamental Technical Problems, Polish Academy of Sciences, Warsaw.

SZELAGOWSKI, Franciszek (Warszawa)

Strength tests of polyester resin reinforced with glass fibers.
Archiw inz lad 8 no.4:293-299 '62.

SZELAGOWSKI, F.

Solution of three-dimensional problem of the theory of elasticity in functions of complex variables. Bul Ac Pol tech 10 no.7:[387]-[394] '62.

1. Department of Mechanics of Continuous Media, Institute of Fundamental Technical Problems, Polish Academy of Sciences, Warsaw.

SZELAGOWSKI, F.

Action of pressure source on the circular half-plane disc.
Bul Ac Pol tech 10 no.9:511-518 '62.

1. Department of Mechanics of Continuous Media, Institute of
Fundamental Technical Problems, Polish Academy of Sciences,
Warsaw.

SZPLACOWSKI, P.

State of stress of a parabolic disk uniformly loaded along
a segment of the edge. Bul Ac Pol tech 11 no.10:529-534 '63.

1. Department of Mechanics of Continuous Media, Institute of
Fundamental Technical Problems, Polish Academy of Sciences,
Warsaw.

SZELAGOWSKI, F.

Circular disc with edge slit subject to tension. Bul Ac Pol
tech 12 no.8:585-590 '64.

Solution of the plane problem of the theory of elasticity in
the functions of the complex variable, an effect of temperature
being taken into account. Ibid.:609-612

1. Department of Bridges and Underground Constructions of the
Technical University, Warsaw.

SZELAGOWSKI, F.

Contribution to the solution of new problem of the two-dimensional theory of elasticity in virtue of the problems already answered. *Gul. Ak. Pol. tech.* 12 no. 3483-485 '64.

Tension of a semiplane disk with semi-circular notch at the edge. *Ibid.* 12487-194.

1. Department of Bridges and Underground Constructions of the Technical University, Warsaw.

SZEPIAGOWSKI, Zygmunt, mgr

Certain problems concerning the value of water and principles
of water tariffication as a raw material. Gosp wodna 23 no. 10:
371-373, 374 0 '63.

1. Central Administration of Water Management, Warsaw.

SZELAZEK, T.

It is necessary to dig a lot of peat.

p. 1 (Rolnik Spoldzielca. Vol. 9 (i.e. 10) no. 12, Mar. 1957, Warszaw, Poland)

Monthly Index of East European Accessions (EEAI) LC. Vol. 7, no. 2,
February 1958

SZELE, Ferenc (Szob)

Work organizational problems at the Szob railroad station.
Magy vasut 7 no.9:5 1 My '63.

SZELE, Mihaly, egyetemi tanar; MARTOS, Ferenc; CLAUS, Alajos; HARGITTAY, Sándor; VERO, Jozsef, dr.

An account of the Executive Committee session held on May 24, 1957.
Koh lap 12 no. 4/5 199-208 Ap-My '57.

1. Orszagos Magyar Banyaszati es Kohaszati Egyesulet elnoke
(for Szele).
2. Orszagos Magyar Banyaszati es Kohaszati Egyesulet fotitkara
(for Martos).

The Iron and Steel Industry of the U.S.S.R. in the Fourth Five-Year Plan (1946-1950). H. Szele. (Banyaszati es Kohaszi Lapok, 1950, vol. 5, June, pp. 335-339; May, pp. 382-384). [In Hungarian]. On the basis of the book with the above title by I. P. Bardin, the development of the iron and steel industry of the U.S.S.R. during the present five-year plan is reviewed. The general tendency appears to be towards decentralization and building of numerous works in extra-European territories. The most important capital investments are: Building and extension of ironworks in the Urals and Siberia, affecting a total of seven works, e.g., Magnitogorsk, Chelyabinsk, and Novotagisk. At two of these works four new batteries of coke ovens, two blast-furnaces, 20 open-hearth furnaces, two Bessemer converters, five electric furnaces, three blooming mills and nine finishing mills are being built, and Magnitogorsk will become one of the largest ironworks in the world. To supply the Leningrad area, steelworks are being built which will utilise iron ore from the Kola peninsula, and coal and peat from the Gulf of Pechora. The mining of ore and the production of refractories are also being stepped up considerably, e.g., 2,78 million tons of firebricks and 960,000 tons of Dinas are to be produced in 1950. Reconstruction of war damage is a heavy burden owing to the very large losses in both materials and skilled

(over)

1ST AND 2ND ORDERS																										3RD AND 4TH ORDERS																									
PROCESSES AND PROPERTIES INDEX																										1ST AND 2ND ORDERS																									
<p>5</p> <p>2</p> <p>The Possibilities of Utilizing Indigenous Ores. M. Beck. (Kohácsi Lapok, 1931, vol. 6, Feb., pp. 26-30). (In Hungarian). The author reviews briefly the availability of ores in Hungary and their utilization possibilities. He describes their location, quality, and extent to which they are utilized, also experiments to find better methods of utilization. The Rudabanya iron ores are the most important. There are considerable deposits of manganese ore in the Urkut area; the raw ore contains 16 to 33% Mn; after washing it contains about 38 to 40% Mn and about 50% of this is in 2-5 mm. particles. Another important material containing iron is pyrites cinder. A suitable method has now been found for reducing the copper in this material from 1-80% to 0.1-0.15%. The recovery of copper, gold, and silver from the pyrites is now possible. --R. G.</p>																																																			
<p>ASH 11A METALLURGICAL LITERATURE CLASSIFICATION</p>																																																			

SZELE, M.

Inaugural speech of the president of the Hungarian Mining and Metallurgical Society.
p. 84. (Banszati Lapok, Budapest, Vol. 10, no. 2, Feb. 1955)

CO: Monthly list of East European Accessions (EEAL), LC Vol 4, no. 6, June 1955 Uncl

SZELE, M.

SZELE, M. Newest trends in the development of iron metallurgy. p. 6.

Vol. 11, no. 15, Aug. 1956

MUSZAKI ELET

TECHNOLOGY

Budapest, Hungary

So: East European Accession, Vol. 6, No. 5, May 1957

SLELE, M.

✓ Recent Trends in Ferrous Metallurgy. M. Szabo. (Kokorozst. ¹⁸ ~~Long~~ 1956, 11, (7), 297-300). The author refers to recent trends in ferrous metallurgy such as: preparation of coal coke before charging in the coke oven, production of ore-cake mixtures, various ore concentration, ore dressing, and ore ~~casting~~ methods, the Lonley process, the pelletizing and blooming hearth processes, high pressure blowing, moisture control of air for blowing, the low-shaft furnace, the Lubatti method, the use of O_2 in steel making processes, the turbo-hearth process, various continuous casting methods for steel, vacuum casting, continuous rolling mills, automatic roll setting and continuous cold sheet rolling.—P. K.

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LIT

SZELE, Mihaly

"Iron ore deposits of the Soviet Union as the basis of its iron metallurgy", edited by I.P. Bardin. Reviewed by Mihaly Szele. Koh lap 91 no.12:570-571 D '58.

SEELM, M.

Metallurgy of low-shaft furnaces. (To be contd.) p. 121.

KOHASZATI LAPOK. (Magyar Bányászati és Kohászati Egyesület) Budapest, Hungary
Vol. 14, no. 4, Apr. 1959.

Monthly list of East European Accessions (EEAI), IC, Vol. 8 No. 8,
August 1959.
Uncla.

SEELE, M.

Metallurgy of low-shaft furnaces. Pt. 2. p. 193.

KOHASZATI LAPOK. (Magyar Bányászati és Kohászati Egyesület) Budapest, Hungary
Vol. 14, no. 5, May 1959.

Monthly list of East European Accessions (EEAI), LC, Vol. 8, No. 8,
August 1959.
Uncla.

GAGYI PALFFY, Andras, okleveles banyamernok; BENCZE, Laszlo,
okleveles banyamernok; SZELE, Mihaly; MARTOS, Ferenc;
BUBICS, Gyorgy; LEVARDI, Ferenc

The 1960 general meeting of the Hungarian Mining and
Metallurgical Society. Bany lap 93 no.4:221-247 Ap '60.

1. Orszagos Magyar Banyaszati es Kohaszati Egyesulet
Banyaszati Szakosztalyanak elnoke, es "Banyaszati Lapok"
szerkeszto bizottsagi tagja (for Gagy Palffy).
2. Orszagos Magyar Banyaszati es Kohaszati Egyesulet
Olajbanyaszati Szakosztaly elnoke (for Bencze).
3. Orszagos Magyar Banyaszati es Kohaszati Egyesulet
elnoke (for Szele). 4. Orszagos Magyar Banyaszati es
Kohaszati Egyesulet ~~fotitkara~~, es "Banyaszati Lapok"
szerkeszto bizottsagi tagja (for Martos). 5. Orszagos
Magyar Banyaszati es Kohaszati Egyesulet Alapszabalymodosito
Bizottsag elnoke (for Bubics). 6. Orszagos Magyar
Banyaszati es Kohaszati Egyesulet elnoke, es nehézipari
minis~~ter~~ter also helyettese (for Levardi).

SZELE, Mihaly, egyetemi tanar

How does the Research Institute of the Iron Industry serve
the implementation of the Party decision? Ujit lap 14
no.16:8 25 Ag '62.

1. Vasipari Kutato Intezet igazgathelyettese.

Szele, Tibor Kombinatorische Untersuchungen über den gerichteten vollständigen Graphen. Mat. Fiz. Lapok 50, 223-256 (1953) (Hungarian-German summary)

The author considers directed complete graphs. He defines a path of length k as a sequence of $k+1$ vertices which pass through each vertex exactly once. The author gives a new proof of the fact that there are $k!$ such paths. He also investigates the maximum number of such paths.

P. Erdős, Syracuse, N. Y.

Mathematical Reviews,

Vol. 15, No. 1, p. 115.

Szele, T.

Szele, T. Ein Satz über die Struktur der endlichen Ringe.
Acta Univ. Szeged Sect. C Math. 11 (1966) 1-48.
K. Szele. Math. Ann. 190 (1974) 436-438.

... $n \times n$ integral matrices (a_{ik}) such that a_{ik} for $i > k$ is
divisible by p^{i-k} . The author applies this to the additive
group M^+ of any finite ring M of prime power order p^m .
all $x \in M$... $x^p = 0$ for

Source: Mathematical Reviews,

Vol 19
1974

No.

5444

728

Szele, T.: Die Abelschen Gruppen ohne eigentliche Endomorphismen. Acta Univ. Szeged. Sect. Sci. Math. 13, 54-56 (1949).

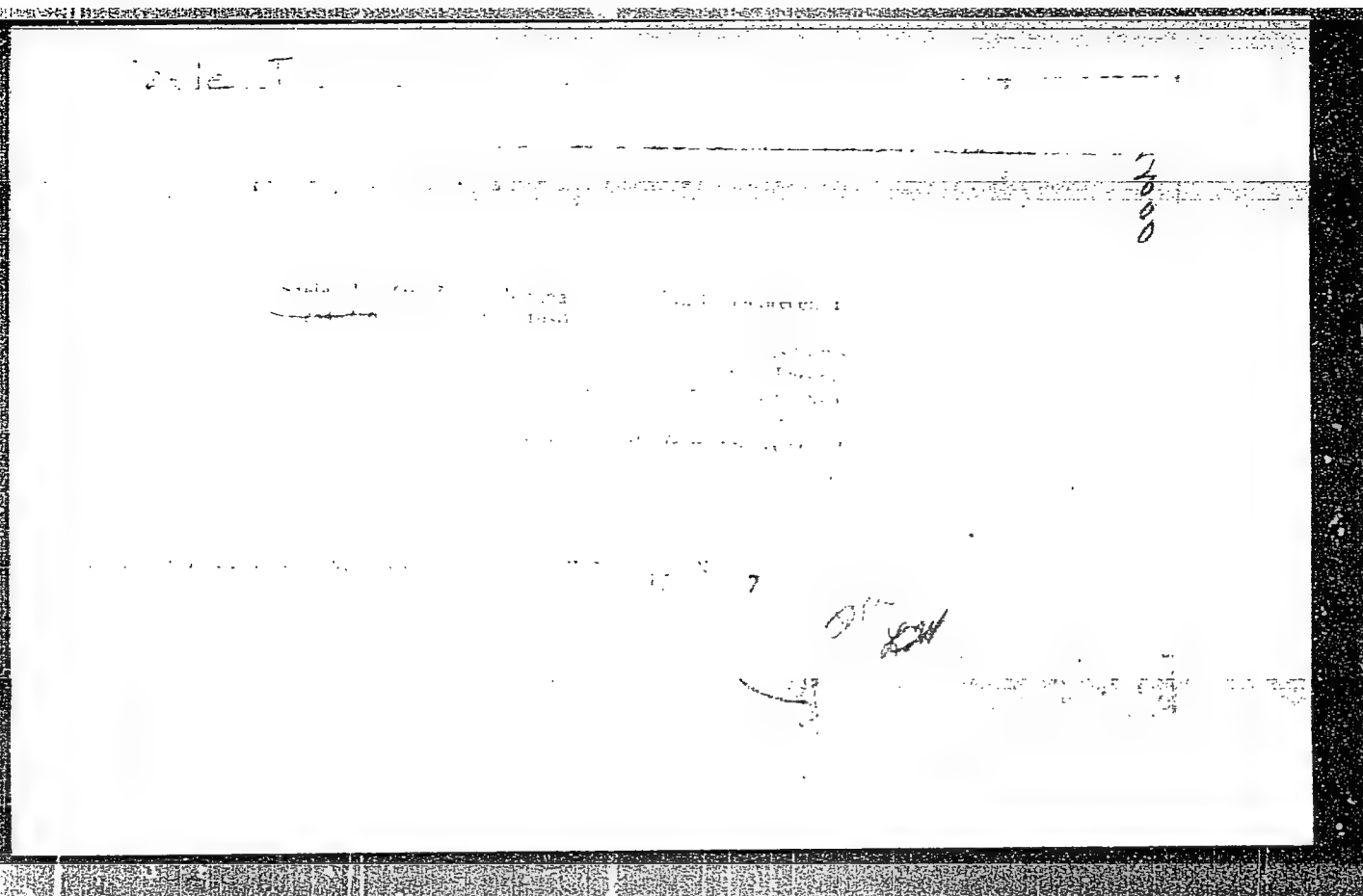
If G is a group for which every nonzero endomorphism is an automorphism then either G is the additive group of rational numbers or a cyclic group of prime order p .

R. M. Thrall (Ann Arbor, Mich.).

Small

Mathematical Reviews,

Vol 1 No.



Theory of Functions of Complex Variables

Libor. On a vector sig
cumbit numbers, N
Hungarian K...
... ..

Zeuli, Tino. Sulla continuazione analitica delle funzioni associate ai sistemi fisici lineari. Boll. Un. Mat. Ital. (3) 5, 247-251 (1956)

Another procedure, similar to that obtained by J. Zun
[Nueva Ciencia 1996 531-542 1999], or Rev. 12 547
is obtained for continuing an analytic function from $z = 2$

(171)

SZELE, T

Rédei, L., und Szele, T. Die Ringe "ersten Ranges."
Acta Sci. Math. Szeged 12, Leopoldo Fejér et Frederico
Riesz LXX annos natis dedicatus, Pars A, 18-29 (1950).
An Abelian group G has rank 1 whenever any two cyclic
subgroups, not 0, have intersection, not 0; and G is locally
cyclic whenever any two of its elements generate a cyclic
subgroup. The authors give a derivation of the well-known
classification of these groups; and they give a survey of all
the rings with locally cyclic additive groups. Apart from
trivial rings these are just the well-known subrings of the
field of rational numbers and the direct sums of certain
trivial rings and finite rings derived from cyclic groups of
prime power order.

R. Baer (Urbana, Ill.).

Source: Mathematical Reviews,

Vol 12, No. 3

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3-24
S. E. T.

Section 7

Journal of Mathematical Reviews

7 12 7

John Doe

Szele, T. On direct sums of cyclic groups. Publ. Math
Debrecen 2, 76-78 (1951)

Let G be an additive abelian group, and let $f(a)$ be the order of the element $a \in G$, $1 \leq f(a) \leq \infty$. Two finite sets of elements a_1, \dots, a_k and b_1, \dots, b_k are equivalent if $\{a_1, \dots, a_k\} = \{b_1, \dots, b_k\}$. A set S of elements $\neq 0$ is an "extremal system" if S contains no finite subset of elements a_1, \dots, a_k such that

$$\min_{1 \leq i \leq k} f(a_i) < \min_{1 \leq i \leq k} f(b_i)$$

If $\{S\} = G$ then S is an extremal generating system. Using a lemma of Rado [see the preceding review] the author proves the following: if G has an extremal generating system S , then G is the (not necessarily finite) direct sum of cyclic groups. This result generalises the familiar basis theorem for finite abelian groups. S. A. Jennings

Source: Mathematical Reviews,

Vol 13 No.2

SZELE, T.

Szele, T. On a theorem of Pontrjagin. Acta Math. Acad.
Sci. Hungar. 2. 121-123 (1951). (English. Russian
summary)

The author gives a new proof of the result [Pontrjagin,
Topological groups, Princeton Univ. Press, 1939, pp. 168-
169; these Rev. 1, 44] that a countable torsion-free abelian
group is the direct sum of cyclic groups if and only if every
increasing sequence of subgroups of an arbitrary finite rank
contains only a finite number of different subgroups. He
also proves an equivalent theorem: A countable torsion-free
abelian group G is the direct sum of cyclic groups if and only
if in G every subgroup of finite rank is finitely generated.

F. Haimo (St. Louis, Mo.).

Source: Mathematical Reviews,

Vol 13 No. 8

SZELE, T.

Szele, T., and Szendrei, J. On abelian groups with commutative endomorphism ring.
Acta Math. Acad. Sci. Hungar. 2, 309-324 (1951) (Russian summary)

If an Abelian torsion-group has a commutative ring of endomorphisms, then every endomorphic image of it (and hence every subgroup of it) is fully invariant. The group must therefore be the (restricted) direct sum of cyclic p -groups or groups of type (p^∞) , at most one for each prime number p . Another description of such a group is that it is a subgroup of the group of all rotations of finite order of the circle, or of the additive group of rationals (mod 1). In the case of mixed Abelian groups, a characterisation of those with commutative ring of endomorphisms is not quite so simple. Let G be a mixed group with commutative ring of endomorphisms, and T its torsion-group. Then T is again locally cyclic but contains no subgroups of type (p^∞) . Moreover for each prime number p which occurs as actual order in T the factor-group G/T is closed for $p:G/T = G/T$. If in addition G does not possess any elements of infinite height with respect to these same prime numbers p , then G lies between the restricted and the unrestricted direct sum extended over the p -primary components of T . These conditions (together with the condition that every endomorphic image of G is fully invariant) are sufficient as well as necessary for G to have a commutative ring of endomorphisms.

The authors conjecture that the single condition that every endomorphic image be fully invariant is necessary and sufficient for G to have a commutative ring of endomorphisms; and that such a group G has at most the power of the continuum. If these conjectures turn out to be true, then every group with a commutative ring of endomorphisms is a subgroup of the additive group of the reals (mod 1). K.A.Hirsch (London).

SO: Mathematical Review, Vol. 14, No. 6, June 1953, pp. 523-608, Unclassified.

SZENDREI, J.

Szele, T., and Szendrei, J. On abelian groups with commutative endomorphism ring. Acta Math. Acad. Sci. Hungar. 2, 309-324 (1951). (Russian summary)

If any Abelian torsion-group has a commutative ring of endomorphisms, then every endomorphic image of it (and hence every subgroup of it) is fully invariant. The group must therefore be the (restricted) direct sum of cyclic p -groups or groups of type (p^∞) , at most one for each prime number p . Another description of such a group is that it is a subgroup of the group of rotations of finite order of the circle, or of the additive group of rationals (mod 1). In the case of mixed Abelian groups, a characterisation of those with commutative ring of endomorphisms is not quite so simple. Let G be a mixed group with commutative ring of endomorphisms, and T its torsion-group. Then T is again locally cyclic but contains no subgroups of type (p^∞) . Moreover for each prime number p which occurs as actual order in T the factor-group G/T is closed for $p: pG/T = G/T$. If in addition G does not possess any elements of infinite height with respect to these same prime numbers p , then G lies between the restricted and the unrestricted direct sum extended over the p -primary components of T . These conditions (together with the condition that every endomorphic image of G is fully invariant) are sufficient as well as necessary for G to have a commutative ring of endomorphisms.

The authors conjecture that the single condition that every endomorphic image be fully invariant is necessary and sufficient for G to have a commutative ring of endomorphisms; and that such a group G has at most the power of the continuum. If these conjectures turn out to be true, then every group with a commutative ring of endomorphisms is a subgroup of the additive group of the reals (mod 1).

K.A.Hirsch (London).

SO: Mathematical Review, Vol 14, No. 6, June 1953, pp. 523-608, unclassified.

SZELE, T.

Mathematical Reviews

Vol. 14 No. 10

Nov. 1953

Algebra

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Szele, T. On direct sums of cyclic groups with one amalgamated subgroup. Publ. Math. Debrecen 2, 302-307 (1952).

The author considers the Abelian group G generated by elements a_1, a_2, \dots subject to the defining relations $m_1 a_1 = m_2 a_2 = \dots = c$, where the m_i are integers greater than 1. He shows that G is the direct sum $G = A + B$ of a group A which is countable (or 0) and of the same type as G , but with distinct m_i while B is the direct sum of finite cyclic groups. Hence he restricts himself to the study of groups G of type A . Such a group G is a direct sum of cyclic groups if and only if the set of integers m_i is bounded. The torsion-free factor-group G/T is of rank 1 and isomorphic to the additive group of rational numbers generated by the reciprocals of the m_i . The group G is torsion-free if and only if all the m_i are co-prime in pairs. T is a direct summand of G if and only if there is no prime number of which arbitrarily high powers divide some m_i . If the additional relation $mc=0$ is introduced, with $m>0$, then the group is a direct sum of cyclic groups if and only if for no prime factor of m arbitrarily high powers divide some m_i .

K. A. Hirsch (London).

SZELE, T.

Fuchs, L., and Szele, T. Contribution to the theory of semisimple rings.
Acta Math. Acad. Sci. Hungar. 3, 233-239 (1952). (Russian summary)

In this paper, a ring R is called semisimple if R has no non-zero nilpotent left ideals and satisfies the minimum condition on left ideals. Generalizing a classical theorem of Wedderburn and Artin, the authors show that R is semisimple if and only if every left ideal of R has a right unit, or equivalently every left ideal is generated by an idempotent. The sufficiency is proved by showing that R is a direct sum of a finite number of minimal (non-nilpotent) left ideals (which are total matrix algebras over skew fields; cf., e.g., Artin, Nesbitt, and Thrall, Rings with minimum condition, Univ. Michigan Publ. Math. no. 1, 1944, chapters 4 and 5; these Rev. 6, 33).

They also show that every left ideal of R has a left unit if and only if R is a direct sum of a finite number of skew fields. Every subring of R has a left unit if and only if R is a direct sum of a finite number of fields F_i , each of which is an algebraic extension of the field of integers modulo some prime p_i . An interesting corollary is that every subring of a skew field F is a skew field if and only if F is an algebraic extension of the field of integers modulo some prime p . (A minor error occurs in the proof of Lemma 2; M_2 should be described as a left ideal of R which is a maximal left ideal of M_1 .)
M. Henriksen (Lafayette, Ind.).

SO: Mathematical Review, Vol 14, No. 8, Sept. 1953, pp. 713-830.

SZELE, Tibor

✓
Mathematical Reviews
Vol. 15 No. 3
March 1954
Algebra

7-13-54
LL

② math 2
✓
Szele, Tibor. The multiplicative group of the roots of unity. Magyar Tud. Akad. Mat. Fiz. Oszt. Közleményei 3, 55-58 (1953). (Hungarian)
A group G has property P if no two of its subgroups are isomorphic. The author proves that G has property P if and only if it is isomorphic with some subgroup of the multiplicative group of all roots of unity. P. Erdős.

Kertész, A., and Szele, T. On the existence of non-discrete topologies in infinite abelian groups. Publ. Math. Debrecen 3 (1953), 187-189 (1954).

The following theorem is proved: Every infinite abelian group admits a non-discrete topology (making it a topological group) satisfying the first axiom of countability. An abelian group admits a non-discrete subgroup topology (i.e., there exists a neighborhood basis at the group identity consisting of subgroups only) if and only if it does not satisfy the minimum condition for subgroups. The proof utilizes a theorem by Prüfer [Math. Z. 17, 35-61 (1923)] and Kuroš [Math. Ann. 106, 107-113 (1932)] and proceeds as follows: If the group G contains an element of infinite order, any non-discrete subgroup topology of the integers will do.

Otherwise, if G does not satisfy the minimum condition, the above Prüfer-Kuroš theorem implies that G contains an infinite subgroup which is the direct sum of an infinite number of cyclic groups, and we again obtain the desired subgroup topology. In the presence of the minimum condition, the Prüfer-Kuroš theorem implies that G contains a subgroup of type p^∞ [see Prüfer's paper for the definition of p^∞] which, qua subgroup of the circle, has a nondiscrete metrizable topology. The converse of the last part is proved in a straightforward manner and is valid also for noncommutative groups. G. K. Kalisch (Minneapolis, Minn.).

SZELE, T.

Mathematical Reviews
Vol. 15 No. 4
Apr. 1954
Algebra

8-24-54
LL

③ 4
Fuchs, L., Kertész, A., and Szele, T. On a special kind of duality in group theory. I. Acta Math. Acad. Sci. Hungar. 4, 169-178 (1953). (Russian summary)

If G is a group, then $S(G)$ is the set of all essentially different subgroups of G and $F(G)$ is the set of all the essentially different homomorphic images of G [where two groups are essentially the same if they are isomorphic]. The authors determine all countable abelian groups A such that $S(A) = F(A)$; they determine all pairs of countable abelian groups A and B such that $S(A) = F(B)$ and $F(A) = S(B)$; and they determine all pairs of countable abelian groups U, V such that $S(U) = F(V)$. R. Baer.

Mathematical Reviews
Vol. 15 No. 3
March 1954
Algebra

7-13-54
LL

Kertész, A., and Szek, T.: Abelian groups every finitely generated subgroup of which is an endomorphic image. Acta Sci. Math. Szeged 15, 70-76 (1953).

Let G be a torsion abelian group. The authors prove that every finitely generated subgroup of G is an endomorphic image of G if and only if each primary component P of G which has a non-trivial maximum complete subgroup A has the property that in P/A there is no bound to the order of the elements. On the other hand, suppose that G is an abelian group with some elements of infinite order. A necessary and sufficient condition that every finitely generated subgroup of G be an endomorphic image is that G contain a free abelian group of rank n as a direct summand for each positive integer n or that G splits into the direct sum of a free abelian group of finite rank and a torsion abelian group H , where every finitely generated subgroup of H is an endomorphic image of H . F. Haimo (St. Louis, Mo.).

/ Szale, Tibor. Geometrical proof of two structure theorems I = F/W
of finite theory. (Hungarian)

Expanded version of a paper in Acta Math. Acad. Sci
Hungar. 5, 101-107 (1954); MR 16, 213.

"Two structure theses of the theory of rings and their geometric demonstration."
Kozlenenyei, Budapest, Vol 4, No 1, 1954, p. 49

SO: Eastern European Accessions List, Vol 3, No 10, Oct 1954, Lib. of Congress

SZELE, T.

HUNG

Szele, T. Simple proof of the Wedderburn-Artin structure theorem 1. F/W
Acta Math. Acad. Sci. Hungar. 5, 101-107

(1954). (Russian summary)

In this note it is pointed out that the structure theorem for semi-simple rings with descending chain condition is an immediate corollary of the density theorem for irreducible rings of endomorphisms.

W. G. Lister.

8/27

SZELE, T.

Szele, T. On the basic subgroups of abelian p -groups.
~~Acta~~ Math. Acad. Sci. Hungar. 5, 129-141 (1954).
(Russian summary)

After reviewing Kulikoff's [Mat. Sbornik N.S. 16(58), 129-162 (1945); these Rev. 8, 252] concept of a basic subgroup B of a primary abelian group G , the author proves that B is a homomorphic image of G . The proof may be paraphrased as follows. B is a direct sum of cyclic groups. If T is the torsion subgroup of their complete direct sum, there is a homomorphism of G into T . This is to be followed by the homomorphism of T onto B obtained by sending the $2n$ th component into the n th. From this the author deduces that if a direct sum of cyclic groups is a homomorphic image of G , it is also a homomorphic image of B .

I. Kaplansky (Chicago, Ill.).

SZELL, T.

38. Applications of hydroxy nitro chalcones in micro analyses. Rapid and direct detection of alkaline earth metals: detection of $\text{Ca}(\text{II})$ in the presence of $\text{Sr}(\text{II})$ and $\text{Ba}(\text{II})$ — G. V. ATINASSKY, I. DEZSÖ, T. SZELL. (Magyar Kémiai Polyóirat — Vol. 60, 1936, No. 12, pp. 373-375, 2 tabs.)

The analytical usefulness of 2-hydroxy-4'-nitro-chalcone as a reagent was studied, and it was found that it produces colour reactions, or coloured precipitates with several metal ions in alkaline media. According to the experimental findings all three functional groups of the chalcone derivative are necessary for the complex formation. A rapid and direct method was evolved for the detection of alkaline earth metals in the presence of other metal ions. It was established that 2-hydroxy-4'-nitro-chalcone is useful for the detection of Ca^{2+} in the presence of Sr^{2+} and Ba^{2+} ions.

CH

18

SZELE, T.

4

✓ Szele, T. On a finiteness criterion for modules. Publ. Math. Debrecen 3 (1954), 253-256 (1955).

1 - F/W

MS The author proves that if a ring satisfies both the ascending and descending chain conditions for its sub-rings then the ring must be finite. The proof is first given for division rings which follows from the observation that the ring then is absolutely algebraic over a prime field of characteristic $p > 0$ and then invoking a result of Jacobson. The general case follows by piecing the ring modulo its radical together with matrix rings which turn out to be finite from the division-ring case. The radical is then shown to be finite and the theorem is thereby proved.

I. N. Herstein (Philadelphia, Pa.)

Sum

02812, 1

[Szele, T. Nilpotent Artinian rings. Publ. Math. Debrecen 4 (1955), 71-78.]

MS 1-F/W

An Artinian ring is one satisfying the descending chain condition on left ideals. This paper carries out a study of nilpotent Artinian rings. Using heavily the decomposition of the additive group of a nilpotent Artinian ring R , the author shows it must satisfy the descending chain condition for additive subgroups, and so, using a result of Kurosh (which the author also proves in this paper) the additive group of R is pinned down fairly completely. The problem then reduces to studying p -rings, where p is a prime, which are Artinian. Let $m > 0$ be the least integer for which the group $p^m R$ contains no non-zero elements of finite height, and let R^* be $\{x \in R \mid p^m x = 0\}$. R^* is a finite nilpotent subring of R and is called the kernel of R . The author proves, amongst other things, the following. Let $F(R^*)$ be the nilpotent Artinian p -rings having the same kernel R^* . If R^* is any finite nilpotent p -ring, then if $R^* \neq 0$ it is the only finite member of $F(R^*)$, and every R in $F(R^*)$ has as additive subgroup a group obtainable in a

1/2

(over)

Size, T.

well-defined manner (explicitly given in the paper). Conditions for isomorphism of two members of $F(R^*)$ are explicitly given; also, $F(R^*)$ contains only a finite number of non-isomorphic rings. $F(R^*)$ has members other than R^* if and only if R^* has an annihilator of order p^n ; also the commutativity of the kernel of R implies that of R . There exist only a countable number of non-isomorphic nilpotent Artinian rings. The author adds a remark that he only needs the descending chain condition on two-sided ideals for his results to remain valid.

I. N. Herstein (Philadelphia, Pa.).

2/2

Smw
fgh

SZELE, TIBOR

✓ Fuchs, László; and Szele, Tibor. Abelian groups with a
single maximal subgroup. Magyar Tud. Akad. Mat.

Fiz. Oszt. 1967, 5, 755, 1967-1969, 1967-1969

The authors prove that an abelian group G has a single

maximal subgroup M and only if it admits a representation

as a direct product of a cyclic group and a group of prime power

order, and B is either a group of prime power order or a group isomorphic to a prime subgroup.

untermgruppe B of the additive group of the p -adic in-

tegers. This theorem answers an apparently difficult

group-theoretical question in the commutative case.

J. Kertész, Debrecen!

Handwritten signature

Szele, T.

1 - P/7

SPH

(2)

Szele, T

I. Kaplansky (Princeton, N.J.).

Fuchs, L. On abelian torsion groups which can not be represented as the direct sum of a given cardinal number of components. Acta Math. Acad. Sci. Hungar. 7

the author generalizes the results of the preceding

1/2

Szele, Tibor. An elementary proof of the fundamental theorem for finite fields. Mat. Lapok 7 (1956), 249-254. (Hungarian. Russian and English summaries)

The author gives a very simple proof of the following classical theorem: The number of elements in a finite field is a power of a prime. For any prime p and positive integer n there exists a finite field with p^n elements. Any two finite fields with the same number of elements are isomorphic.

A. Kerécs (Debrecen)

1. Kerckhoff, A. and S. J. On abelian groups
in which every homomorphic image can be imbedded.

Acta Math. Acad. Sci. Hungar. 7 (1956), 467-475

(Russian summary)

A group G has property Q if every homomorphic image of G can be isomorphically imbedded in G . The authors

[illegible]

8. $\sum_{i=1}^n \text{sum of } D_i \text{ groups of all the final rank } D_i, \text{ each}$
 9. $\sum_{i=1}^n \text{sum of } D_i \text{ groups of all the final rank } D_i, \text{ each}$

1000; THREE TWO THREE FOUR FIVE SIX SEVEN EIGHT NINE

by a finite number of division rings and natural numbers

M. H. Harrison, Princeton, N. J. 11/1

7060:

Szele, Tihor. On a topology in endomorphism rings of abelian groups. Publ. Math. Debrecen 5 (1957), 1-4.

Let G be an abelian group and $E(G)$ be the ring of all homomorphisms of G into itself. If θ is a subset of $E(G)$, the author lets $E_\theta(G)$ be the ring of all elements of $E(G)$ which commute with all elements of θ , and he points out that any ring R with unit is isomorphic to some $E_\theta(G)$ (let G be the additive group of R and θ be all multiplications on the left by elements of R). A subset A of $E_\theta(G)$ is called closed if $f \in A$ whenever for every $x \in G$ there exists an infinite set $\{g_u\} \subset A$ with $f(x) = g_u(x)$ for all u . He shows that this makes $E_\theta(G)$ into a T_1 topological ring. An infinite set $\{\varphi_v\} \subset E_\theta(G)$ converges to $\varphi \in E_\theta(G)$ if every open set B containing zero contains all but a finite number of the $\varphi - \varphi_v$, and a Cauchy system is defined accordingly. It is shown that $E_\theta(G)$ is always complete. An appropriate definition of summable is given and it is shown that an infinite set is summable if and only if it converges to 0.

D. K. Harrison (Haverford, Pa.)

2
I-FW

SZELECSENYI, Istvan

Two of the technical revolutionaries in railroading. Vasut
12 no.2:14-16 25 F '62.

SZELECSENYI, Istvan.

The Kato Haman Socialist Brigade. Magy vasut 7 no.17:3 2 S '63.

SZELECSENYI, Istvan

Let us study the guidelines of the Congress of the Hungarian
Socialist Workers Party. Vasut 12 no.9:5-6 29 S '62.

SZELECSENYI, Istvan

What was omitted from television. Magyar vasut 7 no.1:5 1 Ja '63.

ORCZIFALVI, Laszlo; SZELECSENYI, Istvan

More attention should be paid to the issuance of waybills
and their accounting by railroad stations. Vasut 13 no.11:
26-27 N'63

SZELECSENYI, Istvan

Helping the court with my life experience and loyalty to
the working class; a female railroader on the bench.
Magy vasut 7 no.13:2 2 J1 '63.

SZELECSENYI, Istvan

In the limelight : the cause of international transportation. Vasut
13 no.1:13-14 30 Ja '63.

EXCERPTA MEDICA Sec.9 Vol.11/4 Surgery April 57

1834. SZELECZKY G. I. Chir. Univ.-Klin., Debrecen. *Erfahrungen an Hand meiner Schilddrüsenoperationen. Data on thyroid operations
BRUNS' BEITR. KLIN. CHIR. 1956, 192/2 (140-161) Graphs 2 Tables 5
The increase in the incidence of thyroid affections in the past years is discussed with reference to 216 personal observations. Distinction is made between goitres, of euthyroid or hyperthyroid nature, and Graves' disease. Whereas in the latter case the symptoms of hyperthyroidism occur in a previously normal thyroid, they are seen in addition to primary enlargement of the gland in the former group. Goitre was diagnosed in 111 and Graves' disease in 105 cases. Among the signs of hyperfunction the cardiac symptoms are prominent (tightness, pain, palpitation); the frequency and characteristics of other symptoms of hyperthyroidism are also discussed. Mention is made of the special importance of tonsillar affections in the pathogenesis of hyperthyroidism; the author agrees with Russian authors that mild thyrotoxicosis can be controlled by tonsillectomy alone. This is no longer possible in moderate or severe cases, in which tonsillectomy is contraindicated in view of the risk of postoperative crisis and frequent haemorrhages. The preparation for operation requires administration of thiourea preparations and must patiently be continued until a return to normal function is accomplished; it can be stopped when a critical BMR of about 15% is found. The author's operation is performed under local anaesthesia, with resection of the isthmus and without ligation of the caudal thyroid arteries. Hyperthyroid crisis is given special attention among the postoperative complications. The therapeutic effect of antisthin is discussed.

Fehr - Winterthur

SZELECZKY, G.

HUNGARY

KELENHEGYI, Marton, Dr. KELEMEN, Janos, Tibor, Dr. HORVATH, Gyoza, Dr.:
Medical University of Debrecen, I. Surgical Clinic (director: SZELECZKY,
Gyula, Dr., professor) and Pathological Institute (director: ENDES,
Pongrac, Dr.) (Debreceni Orvostudományi Egyetem I. sz. Sebészeti Klinika
és Kóronautani Intézet).

"Simultaneous Occurrence of Diverticulum, Sarcoma, Carcinoma and
Stone of the Urinary Bladder."

Budapest, Magyar Sebészet, Vol XVI, No 2, May 1963, pages 138-141.

Abstract: [Authors' German summary] In a 68 year old patient, the
authors observed stone formations in the bladder. In the development
of the sarcoma and carcinoma, which arose independently from each other,
the role of the chronic irritation by the stones is noteworthy. 1
Hungarian, 6 Western references.

1/1

SZELE CZKY, Jozsef, dr.; SZAPPANOS, Mihaly, dr.

Data on the problem of abscesses and cysts of urachus. Orv.
hetil. 97 no.14:385-388 1 Apr 56.

1. A Budapesti Bokay Gyermekkorház (igazgató: Sarkany, Jeno dr.)
Sebészeti Osztályának (vezető: Szappanos, Mihaly dr.) közleménye.
(URACHUS
persistent, urachal abscesses & cysts, pathol. (Hun))

SZELECSKY - Jozsef dr.

SZAPPANOS, Milaly, dr.; ~~SZELECSKY, Jozsef, dr.~~; SZERENCSEI, Jozsef, dr.

Burn injuries in childhood. Orv. hetil. 98 no.14:348-351
7 Apr 57.

1. A Budapesti Bokay Gyermekkorház (igazgató: Sarkány, Jeno,
dr.) Sebészeti Osztályának (vezető: Szappanos, Mihály) Kiosztása.
(BURNS, in inf. & child
ther. (Hun))

SZÉLECZKY, Jozsef, Dr.

Meckel's diverticulum from the practical surgeon's point of view. Orv.
hetil. 99 no.14:473-475 6 Apr 58.

1. A Budapesti Heim Pal Gyermekkorház (igazgató: Sarkány Jeno dr.)
Sebészeti Osztályának (mb. vezető: Horváth György dr.) közleménye.
(MECKEL'S DIVERTICULUM, in inf. & child
surg. (Hun))

SZELECZKY, Jozsef, dr.; STUBER, Adrienne, dr.

Surgical and conservative therapy of umbilical hernia. Orv. hetil.
102 no.16:737-739 16 Ap '61.

1. Fovarosí Tanács, Heim Pál Gyermekkorház, Sebészeti és Csécsémó-
osztály.

(HERNIA UMBILICAL ther)

SZELEGIEWICZ, H.

ANNALES ZOOLOGICI. Warszawa. Vol. 17, No. 4, July 1958. In German.

A new species of the Macrosiphoniella D. GU. from Poland. p.41

(Homoptera, Aphididale)

SCIENCE

Monthly List of East European Accessions (EEAI), IC, Vol. 8, No. 2,
February 1959, Unclass.

Szelegiewicz, H.

Two new species of plant lice (Homoptera, Aphididae) from Poland. p. 1.

ANNALES ZOOLOGICI. (Polska Akademia Nauk. Instytut Zoologiczny).

Warszawa, Poland, Vol. 18, no. 1, Apr. 1959. In German.

Monthly list of East European Accessions (EEAI) LC, Vol. 8, No. 8, August, 1959.
Uncla.

SZELEGIEWICZ, H.

A new species of Macrosiphoniella del. Gu. from Poland (Homoptera,
Aphididae). Bul Ac Pol biol 8 no.6:257-260 '60. (EEAI 9:12)

1. Institute of Zoology, Polish Academy of Sciences. Presented by
T.Jaczewski.

(HOMOPTERA) (APHIDIDAE)
(POLAND--MACROSIPHONIELLA)

SZELEGIEWICZ, H.

The identity of *Lachnus nudus* Mordvilko, 1895 (Homoptera, Aphidina).
Bul Ac Pol biol 10 no.1:21-22 '62.

1. Institute of Zoology, Polish Academy of Sciences, Warsaw. Presented
by T.Jaczewski.

*

SZELEGIEWICZ, H.

On the validity problem of the species *Cinara pinihabitans* (Mordv.)
(Homoptera, Aphididae). Bul Ac Pol biol 10 no.7:245-249 '62.

1. Instytut Zoologiczny, Warszawa, Polska Akademia Nauk.
Presented by T. Jacewski.

*

SZELEGIEWICZ, Henryk

Aphididae (Homoptera) from the Near East with a description
of a new subgenus and species. Annales zool. 21 no.7:53-60
'63

SZELEGIEWICS, Henryk

Aphids (Homoptera, Aphididae) of Mongolia. Annales zool
21 no. 11: 109-142 '63.

BULHAK, Barbara; SZELEGIEWICZ, Maria

Colorimetric determination of isoleucine in protein hydrolysates.
Chem anal 6 no.1:83-89 '61. (EEAI 10:7)

1. Department of Biochemistry, University, Warsaw.

(Colorimetry) (Isoleucine) (Proteins)

SKELEI, Bela, dr.

Albright's disease (syndrom of polyostotic fibrous displasia,
pubertas praecox and multiple pigment-spots) Orv. hetil. 95 no.
31:850-854 1 Aug 54.

1. Bacs-Kiskun megye Tanácsa Kórhaza Belgyógyászati Osztályának
(főorvos: Benedikt János dr. erdemes orvos) és Röntgenlaboratóriumának
(főorvos: Turcsányi Ede Vilmos dr.) közleménye
(OSTEITIS FIBROSA
Albright's dis.)

SZELEI, Bela, dr.

Familial osteopoikilosis. Magy. radiol. 8 no.2:89-94 May 56.

1. Bacs-Kiskun Megye Tanácsa Korhaza Röntgenlaboratoriumának
(foorvos: Turcsanyi Ede Vilmos dr.) közleménye.

(OSTEOSCLEROSIS

osteopoikilosis, familial, x-ray manifest. (Hun))

SZELEI, Bela

SZELEI, Bela

Congenital partial gigantism. Magyar. radiol. 9 no.2:123-124 July 57.

1. Bacs-Kiskun megye Tanácsa Korhaza Röntgenlaboratoriumának (főorvos:
Turcsanyi Ede Vilmos dr.) közleménye.

(GIGANTISM

partial gigantism (Hun))

SZELEI, BELA

BITO, Istvan; SZELEI, Bela

Coprolith simulating tumor and causing partial intestinal obstruction. Orv. hetil. 98 no.29:800-803 21 July 57.

1. A Bacs-Kiskun Megye Tanácsa Korhaza Sebészeti Osztályának (foorvos: Kiss, Dezso, dr.) és Röntgenlaboratóriumának (foorvos: Turtsanyi Ede Vilmos, dr.) közleménye.

(INTESTINES, calculi

coprolith simulating tumor & causing partial intestinal obstruct., x-ray diag. (Hun))

(INTESTINAL OBSTRUCTION, etiol. & pathogen.

coprolith causing partial obstruct., x-ray diag. (Hun))

SZELEI, Bela, dr.

Current problems of mass screening technics. Tuberkulozis 14 no.10:
309-312 0 '61.

1. A Bacs-Kiskunmegyei Tanacs Tbc-gondozo Intezetének kozlemenye.

(TUBERCULOSIS prev & control)

CA SZELENYI, F.

Principles and methods of the colorimetric determination of mineral nitrogen compounds in soils. Ferenc Szelenyi. *Agrókémia* 2, 174-207(1950).—A relatively quick method for the detn. of inorg. N compds. in soils, suitable for routine work, was developed. The most essential feature of the method is that the same solvent (a 1.0% K_2SO_4 soln. used in a 1:10 ratio to the soil sample) is used to prep. the stock soln. for the detn. of ammonia N, nitrate N, and nitrite N. The K_2SO_4 soln. was more suitable than the generally used $KAl(SO_4)_3$ or KCl , since no turbidity occurs on adding Nessler's reagent. For the detn. of ammonia N 2.0 ml. of a 2% borax soln. and 2 ml. of a Seignette salt soln. (prepd. by dissolving 100 g. cryst. Seignette salt in 200 ml. previously boiled hot distd. water, filtering, and adding 10 ml. Nessler's reagent to the filtrate) are added to 50 ml. liquid, mixed thoroughly, 1 ml. Nessler's reagent is added, and the color intensity of the liquid detd. after 5 min. by a photoelec. app. When nitrate N is detd. the nitrites must first be destroyed. Therefore, 10 ml. liquid is treated with 1 ml. 10% H_2SO_4 and 1 ml. 1% aq. urea and allowed to stand 12 hrs. Then 1 ml. of a stable brucine soln. (prepd. by dissolving 2 g. brucine in 100 g. $CHCl_3$) and 20 ml. concd. H_2SO_4 are added. When cool, the color intensity is detd. At the detn. of N_2O_5 N 50 ml. liquid is mixed with a special reagent and after 15 min. the color intensity detd. by the use of a green color filter. The special reagent is prepd. by dissolving 0.1 g. 1-naphthylamine in 50 ml. 90% $AcOH$ and dilg. to 100 ml. with water. Separately 0.5 g. sulfanilic acid is dissolved in 50 ml. 90% $AcOH$ and dild. to 100 ml. with water. Just before actual use equal portions of both solns. are mixed to obtain the reagent. For soil sampling on the spot special devices were designed. The method to be followed soils are tested on the spot or in the lab. is described in detail.

István Finály

SZELENYI, F.

Improving sodic soils by means of wet fallowing. p. 345.
(KOZLEPÉNYEI. Vol. 11, no. 1/4, 1957. Budapest, Hungary)

SO: Monthly List of East European Accessions (EEAL) LC. Vol. 6, no. 12, Dec. 1957.
Uncl.